

Fletcher Technical Community College

BIOL 1140 Syllabus

Fall 2008

Student Affairs: (985) 857 3659
310 St. Charles Street
Houma, LA 70361-5033

Administration: (985) 857-3655

Course Title: Human Anatomy and Physiology Lecture I
CIP Code (260601)

Credit Hours: 3

Contact Hours: 45 hours

Class Location: FTCC, Allied Health Building

Instructor: Steven Lee, M.S. Pathology (Department of Pathology,
LSU Health Sciences Center, School of Medicine at New Orleans)
Faculty cell (985) 859 0380
Email: slee@ftcc.edu

Department Chair

Terry Authement
Instructor of Mathematics
Interim Department Chair
Department of Mathematics and Science
Room:
Tel: 857 3655, ext 241

Office Hours: posted on classroom door

Prerequisite: Non-developmental placement and a willingness to study. See
"Note on Course Difficulty"

Textbook: Martini, Frederic H. Fundamentals of Anatomy and Physiology, 8th
Edition. Pearson, Benjamin Cummings

Other Materials: blank paper for sketching

Course

Objectives: This is the first of two courses addressing the structure and function of the human body. The primary objective of this course is to introduce the student to the structure and function of the human body and its relationship to the environment. At the end of this

course, the student will have an understanding of human anatomy and a working knowledge of critical components, structures and functions of the human anatomical systems listed below.

Course Description and Schedule:

BIOLOGY 1140: HUMAN ANATOMY & PHYSIOLOGY LECTURE I

Lecture 1

Chapter 1, Part 1 Introduction to anatomy and physiology

- The basic functions of organisms
- The specialties of anatomy
- The Specialties of physiology
- Levels of organization
- An introduction to the organ systems

Lecture 2

Chapter 1, Part 2 Introduction to anatomy and physiology

- Homeostasis
- Negative and positive feedback systems
- Framework of reference for anatomical studies
- Body cavities
- Clinical technology
- Scanning techniques

Lecture 3

Chapter 2, Part 1 The chemical level of organization

Lecture 4

Chapter 2, Part 2 The chemical level of organization

Lecture 5

Chapter 3, Part 1 An intro to the cellular level of organization

- Introduction to cells
- Cell biology
- The cell membrane

Lecture 6

Chapter 3, Part 2 An intro to the cellular level of organization

- The cytoplasm
- The cytosol
- Organelles

Lecture 7

Chapter 3, Part 3 An intro to the cellular level of organization

- The nucleus
- Contents of the nucleus
- How things get into and out of cells

TEST 1

Lecture 8

Chapter 3, Part 4 An intro to the cellular level of organization

The cell life cycle

Cell division

Lecture 9

Chapter 4, Part 1 The Tissue level of organization

Tissues of the body

Tissues and tissue types

Epithelial tissue

Lecture 10

Chapter 4, Part 2 The Tissue level of organization

Glandular epithelia

Glands

Connective tissues

Lecture 11

Chapter 4, Part 3 The Tissue level of organization

Fluid connective tissues

Membranes

The connective tissue framework of the body

Lecture 12

Chapter 4, Part 4 The Tissue level of organization

Muscle tissue

Neural tissue

Tissue injuries and aging

Lecture 13

Chapter 5, Part 1 The Tissue level of organization

The Integumentary system: An overview

Integumentary System Functions

Integumentary System Components

Lecture 14

Chapter 5, Part 2 The Tissue level of organization

The Subcutaneous Layer

Hypodermis

Accessory Structures

Local Control of Integumentary Function

Aging and the Integumentary System

TEST 2

Lecture 15

Chapter 6, Part 1 Osseous Tissue and Skeletal structure

The skeletal system. An Introduction

Functions of the skeletal system

A classification of bones

- Bone Structure
- Bone Histology
- Bone Stress
- Bone Development and Growth

Lecture 16

Chapter 6, Part 2 Osseous Tissue and Skeletal structure

- Intramembranous Ossification
- Endochondral Ossification
- Bone Growth
- Appositional Bone Growth
- The Circulatory Supply to Mature Bone

Lecture 17

Chapter 6, Part 3 Osseous Tissue and Skeletal structure

- The Dynamic Nature of Bone
- A Chemical Analysis of Bone
- Fracture repair
- Bone Markings
- Aging and the Skeletal System

Lecture 18

Chapter 9, Part 1 Articulations

- A Classification of Joints
 - Articulations
 - Articular Form and Function
- A Functional Classification of Joints

Lecture 19

Chapter 9, Part 2 Articulations

- Representative Articulations
- Aging and Articulations
- Bones and Muscles

Lecture 20

Chapter 10, Part 1 Muscle tissue

- Skeletal Muscle Tissue and the Muscular System
- Anatomy of Skeletal Muscle
 - Organization of Skeletal Muscl

Lecture 21

Chapter 10, Part 2 Muscle tissue

- The Contraction of Skeletal Muscle
- Tension Production
- The Arrangements of Motor Units in a Skeletal Muscle

Lecture 22

Chapter 10, Part 3 Muscle tissue

- Energy Use and Muscle Contraction
- Muscle Performance
- Cardiac Muscle Tissue
- Smooth Muscle Tissue

TEST 3

Lecture 23

Chapter 12, Part 1 Neural Tissue

- An Overview of the Nervous System

- Neurons

- Neuroglia

Lecture 24

Chapter 12, Part 2 Neural Tissue

- Neurophysiology: Ions and Electrical Signals

Lecture 25

Chapter 12, Part 3 Neural Tissue

- Synaptic Activity

- Information Processing

Lecture 26

Chapter 13, Part 1 The spinal cord and spinal nerves

- General Organization of the Nervous System

- Gross Anatomy of the Spinal Cord

Lecture 27

Chapter 13, Part 2 The spinal cord and spinal nerves

- Spinal Nerves

Lecture 28

Chapter 13, Part 3 The spinal cord and spinal nerves

- Principles of Functional Organization

- Spinal Reflexes

- Integration and Control of Spinal Reflexes

Lecture 29

Chapter 15, Part 1 Neural Integration I

- An Overview of the Sensory Pathways and Somatic Nervous System

- Sensory Receptors and their Classification

TEST 4

Lecture 30

Chapter 15, Part 2 Neural Integration I

- The Organization of Sensory Pathways

- The Somatic Nervous System

Lecture 31

Chapter 16, Part 1 Neural Integration II

- An Overview of the ANS

- The Sympathetic Division

- The Distribution of Sympathetic Innervation

Lecture 32

Chapter 16, Part 2 Neural Integration II

The Parasympathetic Division

Interaction between the Sympathetic and Parasympathetic Divisions

Integration and Control of Autonomic Functions

Higher Order Functions

Brain Chemistry and Behavior

Aging and the Nervous System

Lecture 33

Chapter 17, Part 1 The Special Senses

Olfaction

Gustation

Vision

Lecture 34

Chapter 17, Part 2 The Special Senses

Retina

Eye Anatomy

Physiology of sight

Lecture 35

Chapter 17, Part 3 The Special Senses

Equilibrium and Hearing

The Anatomy of the Ear

The Vestibular Complex

Hearing

Lecture 36

Chapter 18, Part 1 The Endocrine System

Intercellular Communication

An Overview of the Endocrine System

The Pituitary Gland

The Thyroid Gland

The Parathyroid Glands

Lecture 37

Chapter 18, Part 2 The Endocrine System

The Adrenal Glands

The Pineal Gland

The Pancreas

The Endocrine Tissues of other Systems

Patterns of Hormonal Interaction

Aging and Hormone Production

Test 5 (Final)

Note on course difficulty

Human Anatomy and Physiology Lecture I (Biology 1140) is a course that requires a strong commitment to excellence. To successfully complete this course you must commit to attend all lecture sessions as well as at least 20 hours per week of studying time.

Blackboard:

This is the place to find up-to-the-moment course announcements, lecture test grades, and course documents. It is very important to check Blackboard particularly if you have missed a class lecture or lab. Contact the class instructor if you have any problems accessing your Blackboard account.

General policy:

Students are responsible for all information provided in the course syllabus. If you should have any questions regarding the information, please speak with the course instructor.

Attendance Policy:

Students enrolled in courses are expected to attend all classes. Arrive to class on time. Any student arriving to class after the class has started will be marked tardy. Any student arriving to class more than 5 minutes after the class has started may be recorded as absent. Leaving before the end of class without an excuse and prior approval of the instructor can also be recorded as an absence.

Make-Up Tests

Make-up tests are strongly discouraged and are constructed differently from the regular tests. They include essay and discussions questions, in which case spelling and grammar are also graded. A make-up test will not include any bonus questions and will not be subject to any regular test adjustments that might be applied.

Disruptions:

Beepers and cell phones in the classroom setting are disruptive to the learning environment. All beepers and cell phones must be silenced or turned off. Except in an emergency, the student should wait until class is completed to respond to their messages.

Evaluation and Grading:

Evaluation of this course is based upon 5 exams. Each exam will comprise 50 questions worth 2 points each. There may be bonus questions added to a test. A student must take the test on the test time and date assigned to access the bonus questions and any other adjustment deemed appropriate by the instructor for that test. There is NO DROP GRADE for this course.

For those students enrolled in the practical nursing curriculum
Remember: In order to continue in the Practical Nursing curriculum at Fletcher Technical Community College, you MUST complete this course with at least an 80% average. NO

exceptions! A 70% passing grade as listed below is calculated as the 80% required for Practical Nursing.

Grading Scale: A 90-100 B 80-89 C 70-79 D 60-69
 F 59 or below

Course Transferability:

General education courses that are listed on the Louisiana Board of Regents' *Statewide Student Transfer Guide and Articulation Matrix* are transferable to other public four-year universities and two-year colleges in Louisiana. This publication is available at the BOR's website at www.regents.state.la.us. Courses taught by instructors holding a master's degree may be transferable. Students should check with the receiving institution concerning these courses.

Last Date to Drop a class or resign with a W grade:

October 15, 2008

A student will receive a grade of "F" if dropped by the instructor

Final Exams

December 5 - 10, 2008

**Academic
Honesty:**

Plagiarism, cheating, and other forms of academic dishonesty are prohibited. In addition to other possible disciplinary sanctions imposed through the regular institutional procedures as a result of academic misconduct, your instructor will assign a **ZERO to all students involved**. If a repeated offense occurs, a grade of "F" will be given for the course to all students involved.

**Students with
Disabilities:**

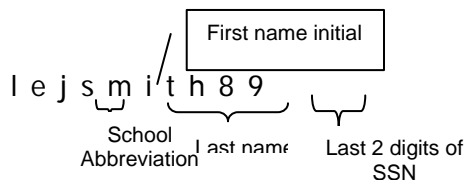
Fletcher Technical Community College complies with Section 504 and the Americans with Disabilities Act. Students with disabilities who seek accommodations must make their requests known by contacting the Disabilities Coordinator at the beginning of each semester.

Students are responsible for reading and understanding the entire content of this syllabus.

Directions for Logging Onto Blackboard:

To log onto Blackboard, go to the bottom of any of the www.lefletcher.edu webpages or go to <http://lctcs.blackboard.com>. Click the Login Button. Enter your username and password. First time - username and password:

Ex: John Smith with a SSN 123-45-6789



After logging in, you can set a new permanent password.


Directions for Printing Information Posted on Blackboard:

Option 1:

- Before opening the document: (this is the recommended method)
 - With the **document still closed**, right click the mouse button on the document name.
 - Select "save target as..." option on the menu.
 - Choose the desktop in the list of options on the left because it will make the document easy to find, and give the document a name (the computer will assign a default name that you can use).
 - Once the document has finished downloading, you can open it from the desktop and print.

** If you are using a school computer, be sure to delete the document when you are done printing.

Option 2:

- While viewing the document: (this method is not recommended because you will often get wasted pages)
 - identify the printer icon just above the left corner of the document 
 - press the icon
 - when the print screen pops up, hit OK.

Attendance Policy for General Education Classes:

Students are expected to attend all classes. If an absence occurs, it is the responsibility of the student to make up all work missed. Any student who accumulates excessive absences (**see chart below**) may be dropped from the class with an "F" in the course. Students with excessive absences are encouraged to drop the course with a "W" in order to avoid receiving the "F". Students arriving after the roll has been called may be recorded as absent.

Students who earn excessive absences prior to the last day to drop will be issued an "F" by the instructor unless the student immediately withdraws from the course.

Monday, Wednesday, Friday Classes (3 classes per week)

Break #1	9/3/08	3 absences
Break #2	9/25/08	5 absences
Break #3	10/15/08 (last day to drop)	6 absences
End of Semester	12/10/08	7 absences

Tuesday, Thursday Classes (2 classes per week)

Break #1	9/3/08	2 absences
Break #2	9/25/08	3 absences
Break #3	10/15/08 (last day to drop)	4 absences
End of Semester	12/10/08	5 absences

Monday – Friday Classes (5 classes per week)

Break #1	9/3/08	5 absences
Break #2	9/25/08	8 absences
Break #3	10/15/08 (last day to drop)	10 absences
End of Semester	12/10/08	12 absences

Night Classes (1 class per week)

Break #1	9/3/08	1 absence
Break #2	9/25/08	2 absences
Break #3	10/15/08 (last day to drop)	2 absences
End of Semester	12/10/08	3 absences

Directions for Logging Onto Blackboard and Domain Computers:

Enter your username and password.

Your username is the combination of:

le + your first name initial + your last name + your last 2 Social Security digits

Your new password is the combination of:

your first name initial + your last name initial + your last 4 Social Security digits

Ex: John Smith with a SSN 123-45-6789

Username: j s m i t h 8 9

Password: js6789